

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently Amended) An apparatus for processing a signal, comprising:
2 a signal dispensing unit [[for]] dispensing ~~an output signal~~ a first personal computer signal
3 output from a personal computer in the form of [[an]] a first analog ~~or digital~~ signal directly from
4 said personal computer;
5 an analog to digital converter converting the first analog signal from said signal dispensing
6 unit of said personal computer to a first digital signal of said personal computer;
7 a signal processing unit [[for]] performing picture-in-picture signal processing enabling one
8 of [[a]] the first digital personal computer signal ~~generated~~ dispensed by said signal dispensing unit
9 through said analog to digital converter and a decoded second first signal as a second digital signal
10 input from an outside source to be displayed on a main screen and the other to be displayed on at
11 least one sub-screen, and [[for]] said signal processing unit processing said ~~first~~ second digital signal
12 to be displayed alone on said main screen, said ~~first~~ second digital signal being any one of a
13 television signal and a video signal;
14 a digital to analog converter converting a digital output signal of said signal processing unit
15 into a second analog signal;

16 an outputting unit ~~[[for]]~~ directly connected to said digital to analog converter and directly
17 connected to said signal dispensing unit of said personal computer, receiving said first analog signal
18 from said signal dispensing unit and said second analog signal from said digital to analog converter
19 converting said digital output signal from said signal processing unit, outputting said the first analog
20 personal computer signal generated dispensed from said signal dispensing unit in response to a
21 control signal for displaying only said the first personal computer signal, and outputting said second
22 analog signal from ~~[[an]]~~ said digital output signal of said signal processing unit in response to a
23 control signal for displaying said the first personal computer signal and said first second signal in
24 picture-in-picture format; and

25 a monitor ~~[[for]]~~ amplifying the signal output from said outputting unit to be displayed.

1 2. (Currently Amended) The apparatus of claim 1, further ~~comprising a signal conversion~~
2 ~~unit for converting said picture-in-picture signal output from said signal processing unit into an~~
3 ~~analog signal before a signal is output from said outputting unit~~ comprised of the first analog signal
4 being outputted from said signal dispensing unit being included in said personal computer, with said
5 personal computer sending the first analog signal to said analog to digital converter being directly
6 connected to said signal dispensing unit of said personal computer, and said personal computer
7 sending the first analog signal to said outputting unit being directly connected to said signal
8 dispensing unit of said personal computer.

1 3. (Currently Amended) The apparatus of claim 1, with said signal processing unit,

comprising:

a decoding unit converting said ~~first~~ second signal into a digital signal and decoding said ~~first~~ second signal;

a scan rate conversion unit ~~[[for]]~~ converting a scan rate of said decoded ~~first~~ second signal as the second digital signal; and

a signal processing unit ~~[[for]]~~ performing a picture-in-picture signal process on said ~~first~~ second signal whose scan rate is converted and said first digital personal computer signal, ~~so that~~ accommodating one of said ~~first~~ second digital signal and said first digital personal computer signal is displayed on said main screen and the other of said ~~first~~ second digital signal and said first digital personal computer signal is displayed on the plurality of sub-screens, or for processing said ~~first~~ second signal to be displayed alone on said main screen.

4. (Currently Amended) The apparatus of claim 1, with said decoded ~~first~~ second signal input from an outside source, further comprising:

a decoding unit converting said ~~first~~ second signal into a digital signal and decoding said ~~first~~ second signal; and

a scan rate conversion unit ~~[[for]]~~ converting a scan rate of said decoded ~~first~~ second signal.

5. (Currently Amended) The apparatus of claim 2, with said decoded ~~first~~ second signal input from an outside source, further comprising:

a decoding unit converting said ~~first~~ second signal into a digital signal and decoding said ~~first~~ second signal

4 signal; and

5 a scan rate conversion unit ~~[[for]]~~ converting a scan rate of said decoded ~~first~~ second signal
6 and outputting the second digital signal.

1 6. (Currently Amended) A method for processing a signal, comprising the steps of:
2 dispensing an output signal ~~output~~ of a first analog signal directly from a personal computer
3 ~~in the form of an analog or digital signal;~~
4 sending the first analog signal to both a conversion unit and an outputting unit, with the first
5 analog signal being sent to said switching unit without conversion;
6 converting the first analog signal to a first digital signal through said conversion unit;
7 performing picture-in-picture signal processing enabling one of a first digital signal of said
8 personal computer ~~signal~~ generated by the step of dispensing said output signal of said first analog
9 signal and a decoded ~~first~~ second signal input from an outside source to be displayed on a main
10 screen and the other to be displayed on at least one sub-screen, and ~~[[for]]~~ processing said ~~first~~
11 second signal to be displayed alone on said main screen, said ~~first~~ second signal being any one of a
12 television signal and a video signal;

13 outputting from said switching unit, said first analog signal directly from said personal
14 computer signal generated from the step of dispensing an output signal in response to a control signal
15 for displaying only said first analog signal from said personal computer ~~signal~~, and outputting an
16 output signal of the step of performing picture-in-picture signal processing in response to a control
17 signal for displaying said first analog signal of said personal computer ~~signal~~ and said ~~first~~ second

18 signal in picture-in-picture format;

19 amplifying the signal output from ~~the step of outputting said analog personal computer signal~~
20 said switching unit; and

21 displaying said amplified signal output.

1 7. (Currently Amended) The method of claim 6, further comprising the step of converting
2 said picture-in-picture signal output from the step of performing picture-in-picture signal processing
3 into ~~[[an]]~~ a second analog signal from a digital output signal of said signal processing unit before
4 ~~[[a]]~~ the signal is output from the step of outputting ~~said analog personal computer signal~~ from said
5 switching unit.

1 8. (Currently Amended) The method of claim 6, with said decoded ~~first~~ second signal input
2 from an outside source, further comprising:

3 converting said ~~first~~ second signal into a second digital signal and decoding said ~~first~~ second
4 signal; and

5 converting a scan rate of said decoded ~~first~~ second signal.

1 9. (Currently Amended) The method of claim 7, with said decoded ~~first~~ second signal input
2 from ~~[[an]]~~ the outside source, further comprising:

3 converting said ~~first~~ second signal into a second digital signal and decoding said ~~first~~ second
4 signal; and

5 converting a scan rate of said decoded ~~first~~ second signal.

1 10. (Currently Amended) An apparatus for processing a signal, comprising:

2 a personal computer generating an output signal accommodating a display of an image
3 generated by said personal computer;

4 a signal dispensing unit dispensing said output signal from said personal computer directly
5 to both an outputting unit and a converting unit;

6 a converting unit converting the output signal from an original first analog signal from said
7 personal computer to a first digital signal of said personal computer;

8 a signal processing unit performing picture-in-picture signal processing enabling one of said
9 output signal from said personal computer signal ~~generated~~ dispensed by said signal dispensing unit
10 and a decoded video signal input from an outside source to be displayed on a main screen and the
11 other to be displayed on at least one sub-screen, and [[for]] said signal processing unit processing
12 said video signal to be displayed alone on said main screen;

13 an outputting unit outputting ~~said output signal of the original first analog signal generated~~
14 from and sent directly from said personal computer signal ~~generated~~ dispensed from said signal
15 dispensing unit in response to a control signal for displaying only said personal computer signal, and
16 outputting an output signal of said signal processing unit in response to a control signal for
17 displaying said personal computer signal and said video signal in picture-in-picture format; and

18 a monitor amplifying and displaying said signal output from said outputting unit.

1 11. (Currently Amended) The apparatus of claim 10, further comprising a signal conversion
2 unit [[for]] converting said picture-in-picture signal output from said signal processing unit from a
3 digital signal into [[an]] a second analog signal before a signal is output from said outputting unit.

1 12. (Currently Amended) The apparatus of claim 10, with said decoded video signal input
2 from [[an]] the outside source, further comprising:

3 a decoding unit converting said video signal into a digital signal and decoding said video
4 signal; and

5 a scan rate conversion unit [[for]] converting a scan rate of said decoded video signal.

1 13. (Currently Amended) The apparatus of claim 12, with said decoded video signal input
2 from [[an]] the outside source, further comprising:

3 a decoding unit converting said video signal into a digital signal and decoding said video
4 signal; and

5 a scan rate conversion unit [[for]] converting a scan rate of said decoded video signal.

1 14. (Previously Presented) The apparatus of claim 10, further comprised of said video signal
2 being selected from the group consisting of a television video signal and a non-broadcasted video
3 signal.

1 15. (Currently Amended) The apparatus of claim 10, further comprising:

2 ~~an analog to digital converter unit converting said output signal from said signal dispensing~~
3 ~~unit from an analog signal into a digital signal for said signal processing unit; and~~

4 a digital to analog converter unit converting said output signal generated from said signal
5 ~~dispensing processing unit from a digital signal into an analog signal for said outputting unit and not~~
6 converting said original first analog signal from said personal computer to said outputting unit and
7 displaying on said monitor said original first analog signal without converting said original first
8 analog signal to a digital signal from said personal computer.

1 16. (New) An apparatus for processing a signal, comprising:

2 a signal dispensing unit dispensing an original first analog signal output from a personal
3 computer to a switching unit and to a first converter unit;

4 said first converter unit converting the first analog signal from said signal dispensing unit to
5 a first digital signal;

6 a signal processing unit performing picture-in-picture signal processing enabling one of the
7 first digital signal from said first converter and a decoded second signal as a second digital signal
8 input from an outside source to be displayed on a main screen and the other to be displayed on at
9 least one sub-screen, and said signal processing unit processing said second digital signal to be
10 displayed alone on said main screen, said second digital signal being any one of a television signal
11 and a video signal;

12 a second converter converting a digital output signal of said signal processing unit into a
13 second analog signal;

14 said switching unit connected to said second converter and connected to said signal
15 dispensing unit of said personal computer, receiving said first analog signal from said signal
16 dispensing unit and said second analog signal from said second converter, said switching unit
17 outputting the first analog signal dispensed from said signal dispensing unit in response to a control
18 signal for displaying only the original first analog signal, and outputting said second analog signal
19 from said second converter unit in response to a control signal for displaying the first analog signal
20 and said second signal in picture-in-picture format; and
21 a monitor amplifying a third analog signal output from said switching unit to be displayed.

1 17. (New) The apparatus of claim 16, further comprised of said signal dispensing unit of said
2 personal computer being directly connected to said switching unit.

1 18. (New) The apparatus of claim 16, further comprised of:
2 said signal dispensing unit of said personal computer being directly connected to said
3 switching unit; and
4 said signal dispensing unit of said personal computer being directly connected to said first
5 converter unit.

1 19. (New) The apparatus of claim 18, further comprised of:
2 said signal processing unit being directly connected to said second converter unit; and
3 said second converter unit being directly connected to said switching unit.

1 20. (New) The apparatus of claim 18, further comprised of:

2 a decoding unit converting said second signal from the outside source into said second digital
3 signal and decoding said second signal; and

4 a scan rate conversion unit directly connected between said decoding unit and said signal
5 processing unit and converting a scan rate of said decoded second digital signal output directly to
6 said signal processing unit.